

# The Smarter Balanced Assessment & Dynamic Learning Maps Consortiums

## Assessment Options for Students with Special Assessment Needs

September 9, 2014

Michael Hock

Director of Educational Assessment  
Vermont Agency of Education

Cindy Moran

State Director of Special Education  
Vermont Agency of Education

Patti Shane

Alternate Assessment Coordinator  
Vermont Agency of Education



# *Assessment Options for Students with Special Assessment Needs*

## AGENDA

- Welcome
- Overview of the Smarter Balanced (SBAC) and Dynamic Learning Maps (DLM) Assessments (Cindy Moran and Michael Hock)
- What We've Learned from Field-Testing
  - Warren Elementary School's Prezie on the SBAC Field Test
  - Teacher Observations during DLM Field Test (Panel Discussion)
- Technology Readiness (Peter Drescher)
- Linking IEPs to the New Standards and Assessments (Maureen Nevers)
- Using What You've Learned (Working Lunch)
- Digging A Little Deeper (Break Out Sessions)
  - DLM (Patti Shane and Cindy Moran)
  - SBAC Accessibility (Michael Hock)



# Why do we need new tests?

Each state pays for its own assessments

- Each state bears the burden of test development; no economies of scale

Based on state standards

- Students in many states leave high school unprepared for college or career; Limited comparability of results across states

Heavy use of multiple choice

- Inadequate measures of complex skills and deep understanding.

Results delivered long after tests are given

- Tests cannot be used to inform instruction or affect program decisions

Accommodations for special education and ELL students vary

- Difficult to interpret meaning of scores; concerns about access and fairness;

Most administered on paper

- Costly, time consuming, and challenging to maintain security

# Why do we need an alternate assessment?

All students should have access to challenging grade level content.

- Some SWD have never been taught academic skills and concepts even at very basic levels. Yet all students are capable of learning at a level that engages and challenges them.

Ensures appropriate inclusion of SWSD in state assessment and accountability systems

- It's the law...IDEA, Section 504 of the Rehabilitation Act of 1973, Title I of the ESEA each require inclusion of all SWD in the state assessment system.

Allows students with multiple disabilities to show what they know and can do in ways that traditional tests cannot

- SWD benefit instructionally from participation. Teachers who have incorporated learning standards into their academic instruction cite unanticipated gains in student's performance and understanding.

Allows modified ways for students to access items, engage in the content, solve problems and provide responses

- Appropriate measurement of achievement needs ensures that appropriate resources are dedicated to helping students succeed.

Evaluates the performance of students who are unable to participate in general assessments even with accommodations

- States are responsible for designing assessment systems that permit all students in the tested grades to be assessed based on grade-level content and achievement standards.



# How will SBAC be different from NECAP?

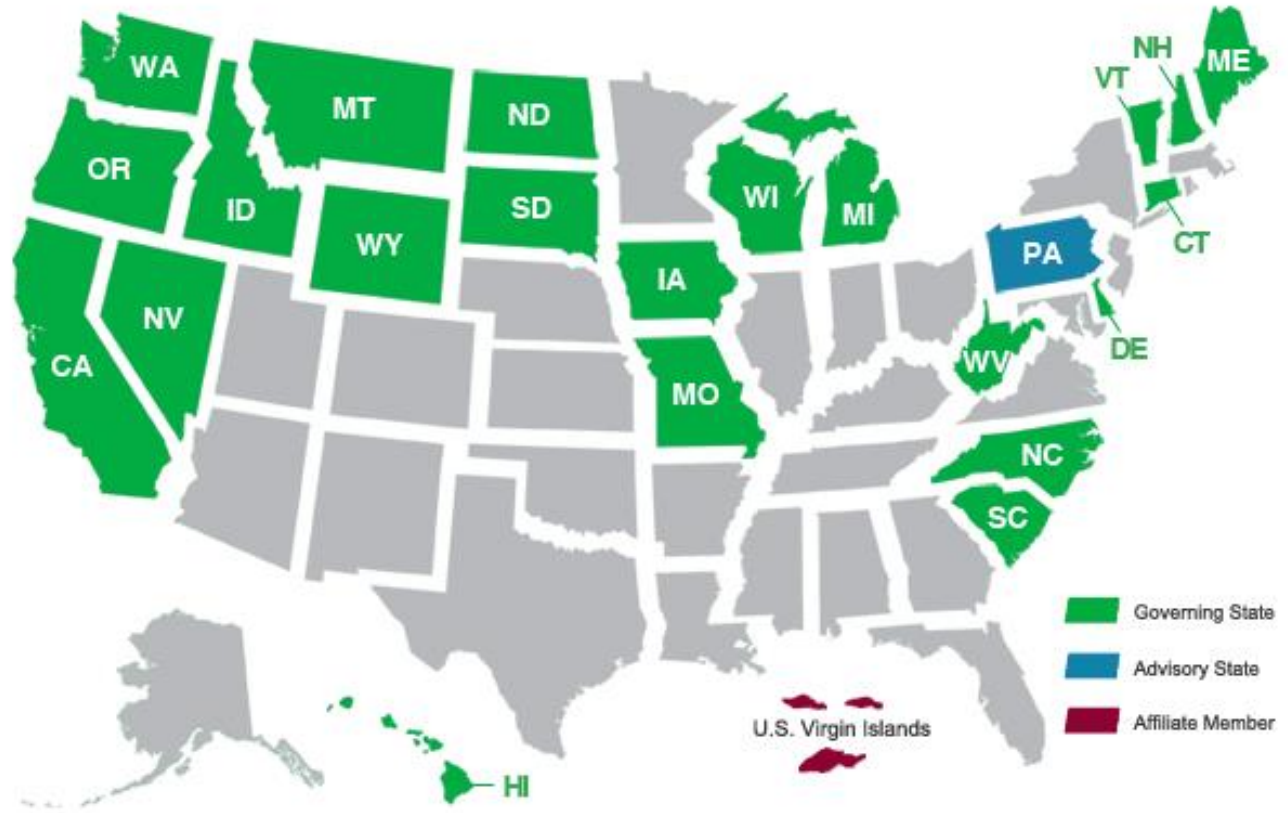
	Smarter Balanced	NECAP
Content Standards	Common Core State Standards	Tri-State Grade Expectations
Achievement Descriptors	On Track to be Career and College Ready	Prepared for Next Grade Level Learning
Test Format	Web-Based	Pencil and Paper
Item Delivery	Computer Adaptive	Fixed Form/Common Item Set
Assessment Types	Summative, Interim and Formative	Summative
Item Types	Multiple Choice, Short Answer, Tech Enhanced, Performance Task	Multiple Choice, Short Answer, Constructed response
Testing Window	12 Weeks/Spring	3 Weeks/ Fall
Results Turnaround	Some Scores Available Immediately; Remainder in About 1 Month	About 3 Months

# How will DLM be different from VTAAP?

	DLM	VTAAP
Content Standards	Common Core State Standards	Tri-State Grade Expectations
Achievement Descriptors	On Track to be Career and College Ready	Prepared for Next Grade Level Learning
Test Format	Web-Based	Portfolio
Item Delivery	Computer Adaptive	Teacher Administered
Assessment Types	Summative, Integrated	Performance Task
Item Types	Multiple Choice, Sorting, Matching	Dependent on Student Response Mode
Testing Window	Year long/Spring window TBD	School year
Results Turnaround	Embedded/On-Demand Summative/TBD	About 3 Months

# Who is Smarter Balanced?

- 25 member states and territories
- 22 Governing States, 1 Advisory State, 1 Affiliate Member
- Washington state is fiscal agent
- WestEd provides project management services





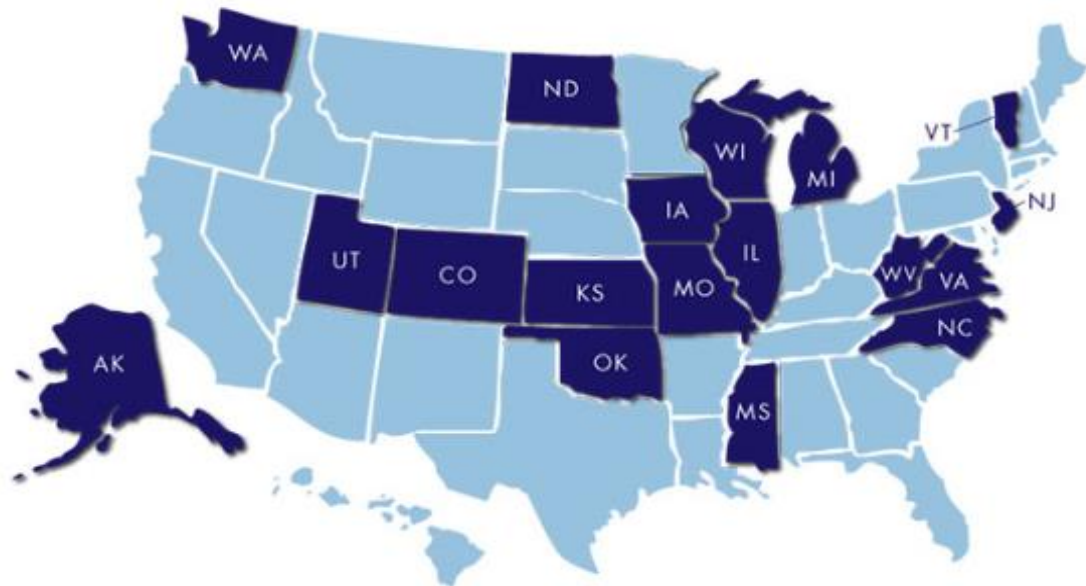
# Who is Dynamic Learning Maps?

## The DLM<sup>®</sup> States

The Dynamic Learning Maps™ Alternate Assessment System Consortium (DLM) is a group of 18 states dedicated to the development of an alternative assessment system. The consortium includes the states of Alaska, Colorado, Illinois, Iowa, Kansas, Michigan, Mississippi, Missouri, New Jersey, North Carolina, North Dakota, Oklahoma, Utah, Vermont, Virginia, Washington, West Virginia, and Wisconsin.

DLM is led by the Center for Educational Testing and Evaluation (CETE) and includes experts from a wide range of assessment fields as well as [key partners](#).

DLM MEMBER STATES



*Click on a DLM state above to view that state's department of education website.*





# What's so “balanced” about Smarter Balanced?

Common Core  
State Standards  
specify  
K-12  
expectations  
for college and  
career  
readiness



Summative assessments  
Benchmarked to CCSS;  
Combine Computer  
Adaptive and Performance  
Tasks

Teachers and  
schools have  
information and  
tools they need to  
improve teaching  
and learning



All students  
leave  
high school  
college  
and career  
ready

Teacher resources for  
**formative assessment  
practices**  
to improve instruction

**Interim assessments**  
Flexible, open, used for  
actionable feedback

# What Is a Dynamic Learning Map?



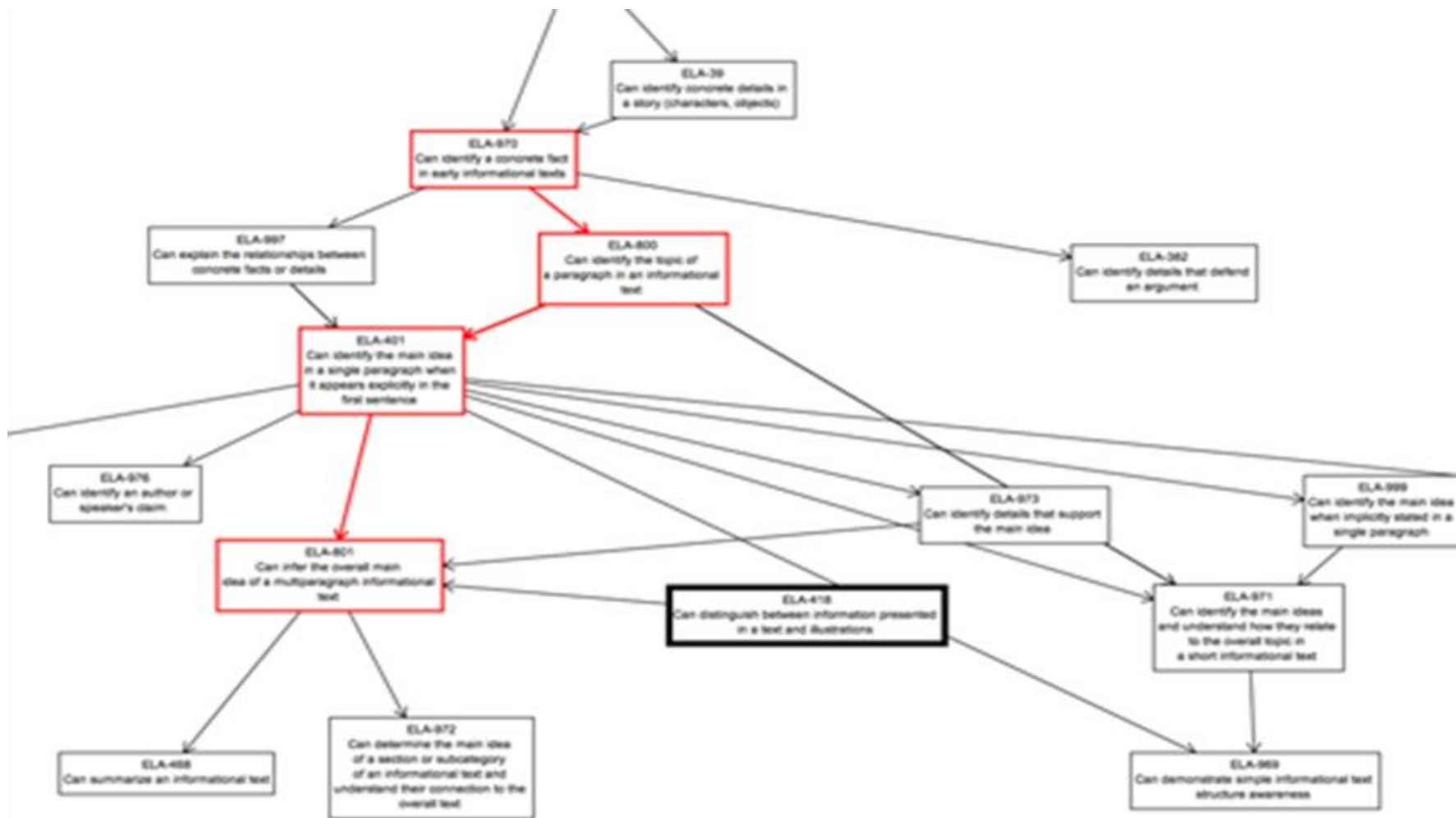
- A learning map is a network of sequenced learning targets.
- Dynamic learning maps not only show the relationships between skills but also show multiple learning pathways.
- Instead of assuming that all children learn a skill in the same way, allowing for multiple pathways recognizes that there are alternate ways to learn the same skill.



**DYNAMIC**  
LEARNING MAPS



# ELA Dynamic Learning Map



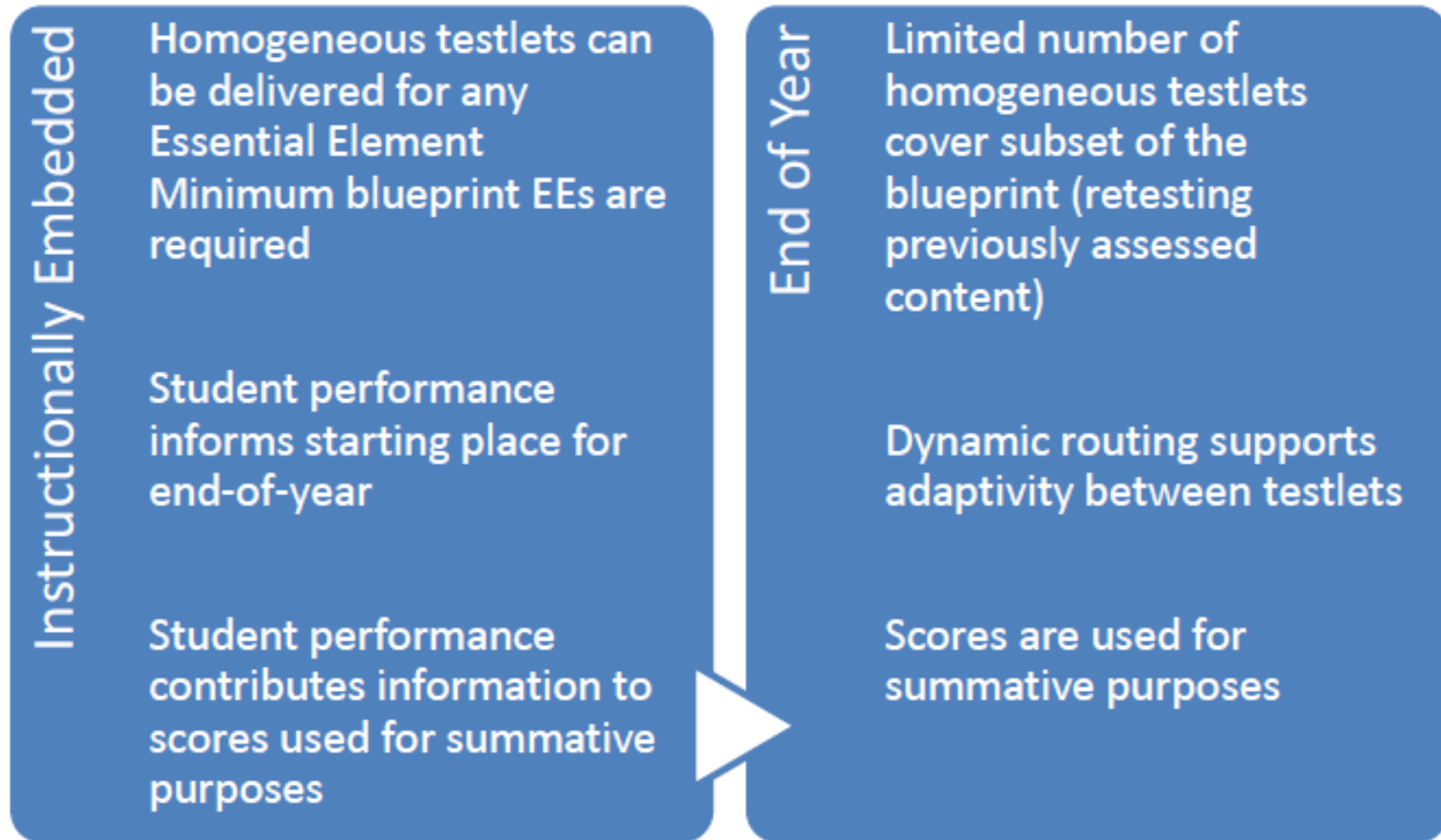
# What's the difference between summative, interim and formative assessments?

- **Summative Assessments** are administered at the end of a specific unit or period of learning, generally near the end of a school year. They are designed to “sum up” how much the student has learned over that period of time, and to determine if the student’s achievement is sufficient to meet standards or pre-defined learning expectations.
- **Interim Assessments** are similar to summative assessments in terms of content but are designed to be administered more frequently in order to determine if students are on track to meet end of grade/unit standards, or to provide additional support or mid-course correction if needed.
- **Formative Assessments** are embedded in the day to day, minute to minute interactions between teachers and students. They are used to gauge the pacing of instruction and to determine if students are ready to move on to new material or if they need additional instruction. Formative assessments are often based on strategic questioning strategies, probes, short quizzes or performance events.

# Integrated

## Overview

The figure below summarizes the key uses of instructionally embedded and end-of-year assessments within the integrated blueprint model.

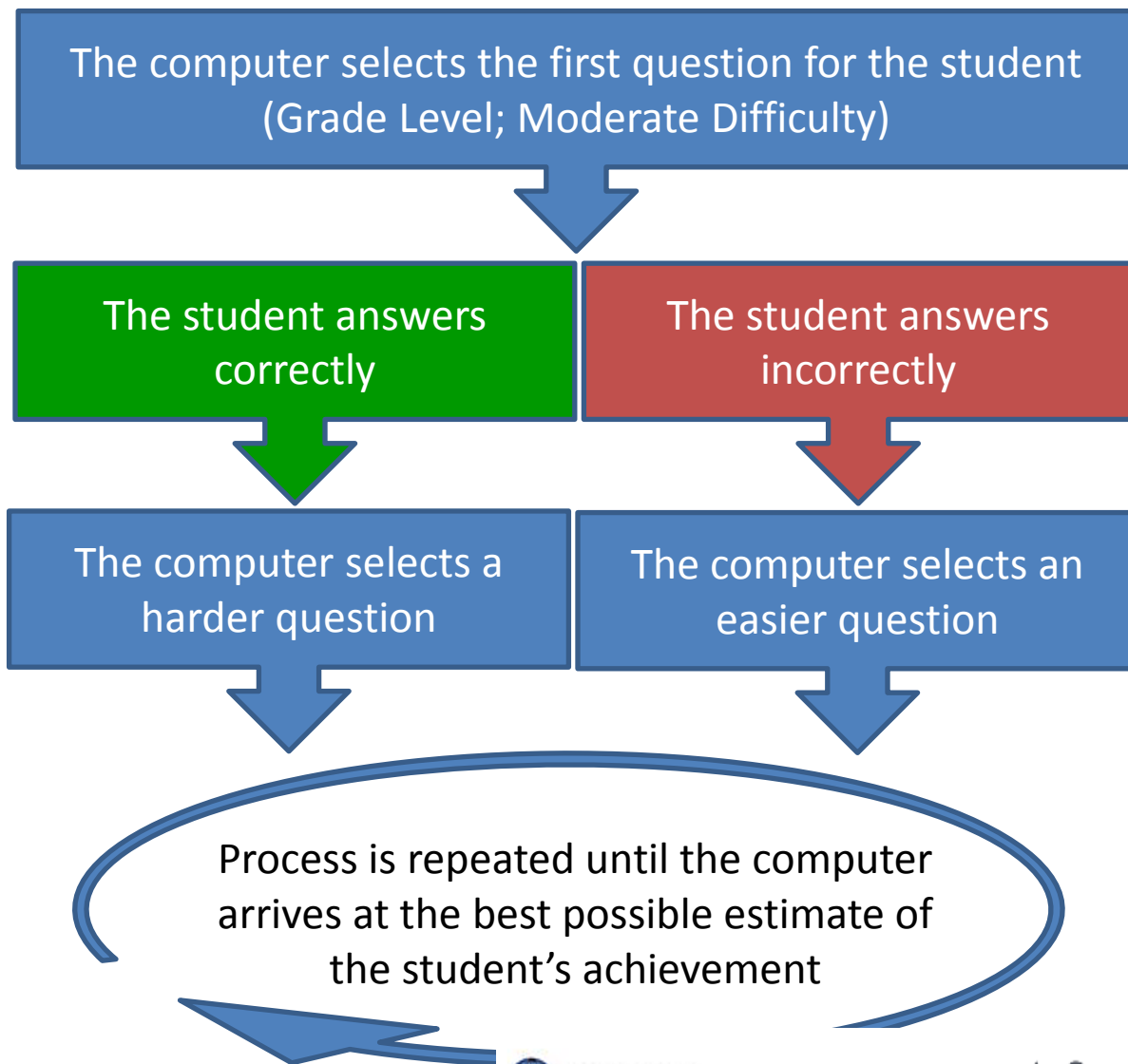




# What is computer adaptive testing (CAT)?



The Computer  
Adaptive  
Assessment  
Algorithm Vastly  
Simplified



**DYNAMIC**  
LEARNING MAPS





# What's so special about Computer Adaptive Testing (aka CAT)?

## Increased precision

- Provides accurate measurements of student growth over time

## Tailored for Each Student

- Item difficulty based on student responses

## Increased Security

- Larger item banks mean that not all students receive the same questions

## Shorter Test Length

- Fewer questions compared to fixed form tests

## Faster Results

- Turnaround time is significantly reduced

## Mature Technology

- GMAT, GRE, COMPASS (ACT), Measures of Academic Progress (MAP)

# What's so special about Computer Adaptive Testing (aka CAT)?

## Increased precision

- Provides accurate measurements of student growth over time

## Tailored for Each Student

- Item difficulty based on student responses

## Increased Security

- Larger item banks mean that not all students receive the same questions

## Shorter Test Length

- Fewer questions compared to fixed form tests

## Faster Results

- Turnaround time is significantly reduced

## Mature Technology

- Touch screen (IPad), Switch, Devices, Teacher Input

# What role will performance tasks play?

## Performance Tasks

- Extended projects demonstrate real-world writing and analytical skills
- May include online research, group projects, presentations
- Require 1-2 class periods to complete
- Included in both interim and summative assessments
- Applicable in all grades being assessed
- Evaluated by teachers using consistent scoring rubrics

“The use of performance measures has been found to increase the intellectual challenge in classrooms and to support higher-quality teaching.”

- Linda Darling-Hammond  
and Frank Adamson,  
Stanford University

# What role will Embedded Items play?

## Instructionally Embedded

- The Dynamic Learning Maps™ Alternate Assessment System uses items and tasks that are embedded in day-to-day instruction. As these embedded items and tasks are given to a student, the student's learning is mapped throughout the year. Because of this, testing and teaching happen at the same time. This gives teachers the opportunity to see what students know during the year when teachers still have time to change instruction to better support student learning.

Another strategy to help students prepare for the DLM assessment is to present instruction and reinforcing similar vocabulary as to what they will view on the assessment. By monitoring their understanding through embedded assessment, using representation and models students will see, and demonstrating the types of questions that will be asked students will develop comfort and confidence with test formats.

# How long are the summative tests?

Test	Grades	CAT	Perf. Task Only	Total	In-Class Activity	Total
English Language Arts/ Literacy	3-5	1:30	2:00	3:30	:30	4:00
	6-8	1:30	2:00	3:30	:30	4:00
	11	2:00	2:00	4:00	:30	4:30
Math	3-5	1:30	1:00	2:30	:30	3:00
	6-8	2:00	1:00	3:00	:30	3:30
	11	2:00	1:30	3:30	:30	4:00

About the same total time as NECAP, but keep in mind that the new tests will measure more than the current assessments

# How long are the DLM Integrated tests?

Summative Test in the Integrated Model	Grades	Minutes Per Testlet (3-5 items, same EE)	Total Minutes
English Language Arts/ Literacy	3-8	12-15	60-75
	11	12-15	60-75
Math	3-8	10	50
	11	10	50

\*Embedded assessments vary depending on the number of essential elements a teacher chooses to assess and the number of times a student is assessed on each EE.

# What supports will be available for special populations?

## Access by Design

- Accurate measures of progress for students with disabilities and English Language Learners
- Accessibility and Accommodations Work Group engaged throughout development
- Outreach and collaboration with relevant associations
- Universal Design
- Embedded Digital Accessibility Features

“Common-Core Tests to Have Built-in Accommodations”



- June 8, 2011



# How will digital technologies improve assessment for special populations?

Computer-delivered assessments provide an array of new opportunities to improve the assessment experience for students with special assessment needs, including students with disabilities and ELLs:

- An expanded notion of Universal Design
- Emphasis on embedded digital accessibility tools that decrease the need for locally provided accommodations
- Integration of assessment delivery system with assistive technologies
- Vastly improved student engagement



# A Conceptual Model for SBAC Accessibility

## Universal Tools

### Embedded

Breaks, Calculator, Digital Notepad, English Dictionary, English Glossary, Expandable Passages, Global Notes, Highlighter, Keyboard Navigation, Mark for Review, Math Tools, Spell Check, Strikethrough, Writing Tools, Zoom

### Non-embedded

Breaks, English Dictionary, Scratch Paper, Thesaurus

## Designated Supports

### Embedded

Color Contrast, Masking, Text-to-speech, Translated Test Directions, Translations (Glossary), Translations (Stacked), Turn off Any Universal Tools

### Non-embedded

Bilingual Dictionary, Color Contrast, Color Overlay, Magnification, Read Aloud, Scribe, Separate Setting, Translation (Glossary)

## Accommodations

### Embedded

American Sign Language, Braille, Closed Captioning, Text-to-speech

### Non-embedded

Abacus, Alternate Response Options, Calculator, Multiplication Table, Print on Demand, Read Aloud, Scribe, Speech-to-text

Available  
to ALL  
Students

Available  
with IEP or  
504 Plan

# A Conceptual Model for SBAC Accessibility

## Universal Tools



## Designated Supports

### Accommodations

#### Embedded

Breaks, Calculator, Digital Notepad, English Dictionary, English Glossary, Expandable Passages, Global Notes, Highlighter, Keyboard Navigation, Mark for Review, Math Tools, Spell Check, Strikethrough, Writing Tools, Zoom

#### Non-embedded

Breaks, English Dictionary, Scratch Paper, Thesaurus

#### Embedded

Color Contrast, Masking, Text-to-speech, Translated Test Directions, Translations (Glossary), Translations (Stacked), Turn off Any Universal Tools

#### Non-embedded

Bilingual Dictionary, Color Contrast, Color Overlay, Magnification, Read Aloud, Scribe, Separate Setting, Translation (Glossary)

#### Embedded

American Sign Language, Braille, Closed Captioning, Text-to-speech

#### Non-embedded

Abacus, Alternate Response Options, Calculator, Multiplication Table, Print on Demand, Read Aloud, Scribe, Speech-to-text

#### Embedded

Breaks, Calculator, Digital Notepad, English Dictionary, English Glossary, Expandable Passages, Global Notes, Highlighter, Keyboard Navigation, Mark for Review, Math Tools, Spell Check, Strikethrough, Writing Tools, Zoom

#### Non-embedded

Breaks, English Dictionary, Scratch Paper, Thesaurus

# A Conceptual Model for SBAC Accessibility

## Universal Tools

### Embedded

Breaks, Calculator, Digital Notepad, English Dictionary, English Glossary, Expandable Passages, Global Notes, Highlighter, Keyboard Navigation, Mark for Review, Math Tools, Spell Check, Strikethrough, Writing Tools, Zoom

### Non-embedded

Breaks, English Dictionary, Scratch Paper, Thesaurus

## Designated Supports



### Embedded

Color Contrast, Masking, Text-to-speech, Translated Test Directions, Translations (Glossary), Translations (Stacked), Turn off Any Universal Tools

### Non-embedded

Bilingual Dictionary, Color Contrast, Color Overlay, Magnification, Read Aloud, Scribe, Separate Setting, Translation (Glossary)

## Accommodations

### Embedded

American Sign Language, Braille, Closed Captioning, Text-to-speech

### Non-embedded

Abacus, Alternate Response Options, Calculator, Multiplication Table, Print on Demand, Read Aloud, Scribe, Speech-to-text

### Embedded

Color Contrast, Masking, Text-to-speech (Math), Translated Test Directions, Translations (Glossary), Translations (Stacked), Turn off Any Universal Tools

### Non-embedded

Bilingual Dictionary, Color Contrast, Color Overlay, Magnification, Read Aloud, Scribe, Separate Setting, Translation (Glossary)

# A Conceptual Model for SBAC Accessibility

## Universal Tools

### Embedded

Breaks, Calculator, Digital Notepad, English Dictionary, English Glossary, Expandable Passages, Global Notes, Highlighter, Keyboard Navigation, Mark for Review, Math Tools, Spell Check, Strikethrough, Writing Tools, Zoom

### Non-embedded

Breaks, English Dictionary, Scratch Paper, Thesaurus

## Designated Supports

### Embedded

Color Contrast, Masking, Text-to-speech, Translated Test Directions, Translations (Glossary), Translations (Stacked), Turn off Any Universal Tools

### Non-embedded

Bilingual Dictionary, Color Contrast, Color Overlay, Magnification, Read Aloud, Scribe, Separate Setting, Translation (Glossary)

## Accommodations

### Embedded

American Sign Language, Braille, Closed Captioning, Text-to-speech

### Non-embedded

Abacus, Alternate Response Options, Calculator, Multiplication Table, Print on Demand, Read Aloud, Scribe, Speech-to-text

### Embedded

American Sign Language, Braille, Closed Captioning, Text to Speech (Reading)

### Non-Embedded

Abacus, Alternate Response Options, Calculator, Multiplication Table, Print on Demand, Read Aloud, Scribe, Speech--to -Text)

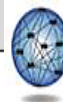
	SBAC	DLM
Universal Tools	<ul style="list-style-type: none"> <li>Available to all students based on student preference and selection, such as calculator, highlighter, glossary.</li> </ul>	<ul style="list-style-type: none"> <li><i>Some of the supports provided via PNP may be comparable to these tools, as they can be changed during assessment administration. Teachers and students are encouraged to determine best fit by using the practice tests.</i></li> </ul>
Designated Supports	<ul style="list-style-type: none"> <li>Features that are available for use by any student for whom the need has been indicated by an educator (or team of educators with parent/guardian and student), such as color contrast and masking.</li> </ul>	<ul style="list-style-type: none"> <li><i>Supports requiring additional tools/materials and supports provided outside the DLM system will typically need prior identification based on need.</i></li> </ul>
Accommodations	<ul style="list-style-type: none"> <li>Digitally-embedded and non-embedded accommodations for students for whom there is documentation of the need for the accommodations on an Individualized Education Program (IEP) or 504 accommodation plan, such as Braille, tactile graphics, ASL.</li> </ul>	<ul style="list-style-type: none"> <li><i>This distinction is not needed in DLM. States can identify which DLM accessibility features should be considered an accommodation and thus documented on the student's IEP.</i></li> </ul>



**DYNAMIC**  
LEARNING MAPS



Accessibility Feature	Supports Provided Within DLM Via PNP	Supports Requiring Additional Tools/Materials	Supports Provided Outside the DLM System	Supports Requiring IEP Documentation in STATE NAME	Supports Selected for STUDENT NAME	Notes and Evaluation
A. Magnification	X					
B. Invert Color Choice	X					
C. Color Contrast	X					
D. Color Overlay	X					
E. Read Aloud with highlighting – Text to Speech text only	X					
text & graphics	X					
graphics only	X					
nonvisual	X					
F. Uncontracted Braille – download, print on embosser		X				
G. Single-switch system/PNP enabled		X				
H. Two switch system		X				
I. Administration via iPad		X				
J. Adaptive equipment used by student		X				
K. Individualized Manipulatives		X				
L. Human Read Aloud			X			
M. Sign interpretation of text			X			
N. Language translation of text			X			
O. Test administrator enter responses for student			X			
P. Partner Assisted Scanning			X			



**DYNAMIC**  
LEARNING MAPS



**VERMONT**  
AGENCY OF EDUCATION



**Smarter  
Balanced**  
Assessment Consortium



# Does CAT have any special advantages for special students?

- **PRECISE** – Unlike fixed form tests, CAT is precise at all ability levels, not just at the proficient cut score
- **EFFICIENT** – Takes less items than fixed form tests to reach a valid and reliable estimate of ability, reducing testing time by as much as 50%; results are available almost immediately.
- **RESPONSIVE & HUMANE** – CAT algorithm produces an individual item set for each student, adapting after each student response; item set comprised of items the student CAN and CAN'T answer in equal proportion
- **Secure and Adaptable** – CAT eliminates most test security concerns of fixed form tests allowing for longer test windows and small group or individualized administrations

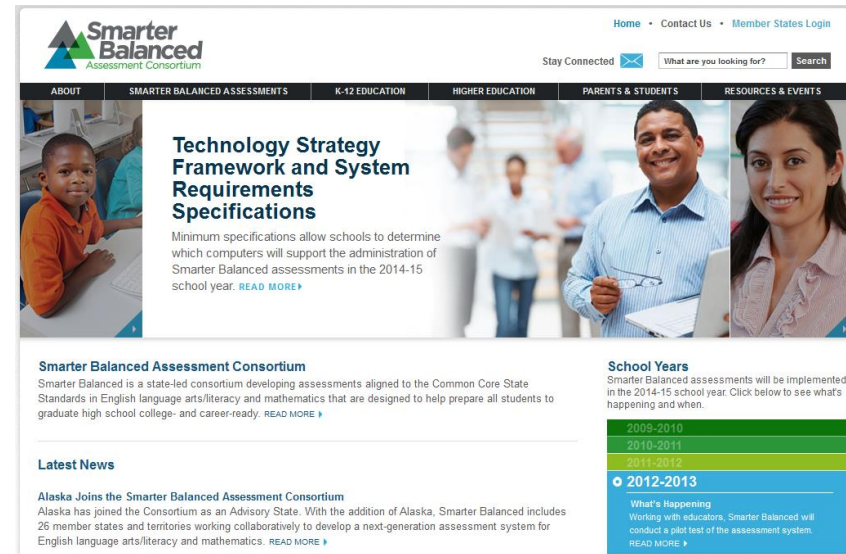
# What do schools need to know?

- **COST** – All the direct costs for development, administration, scoring and reporting the Smarter Balanced Assessments will be covered by the State of Vermont
- **SCHOOL/DISTRICT RESPONSIBILITIES** – (1) computers, (2) access to the internet, (3) headphones or earbuds, (4) tech support for set-up, (5) staff for test administration, (6) released time for training test administrators
- **FIELD TESTING** – To ensure that the new technologies developed for Smarter Balanced work as intended, the consortium is currently field-testing the assessment with more than 3 million students in 22,000 schools (nearly 5 thousand students in 28 Vermont schools).
- **TECHNOLOGICAL READINESS** – According to current estimates, all but two or three Vermont schools have enough computers, sufficient internet bandwidth and minimum tech support to be ready for the first official administration of the test in Spring 2015
- **TECHNOLOGICAL DEMANDS** - SBAC will place mild to moderate demands on the technology infrastructure of typical US schools.

Geoff Fletcher, SETDA: *“If a school can’t handle these tests then the school has much bigger problems because their students will not be able to access all the excellent digital learning tools that are being introduced every day.”*

# Where can I learn more about Smarter Balanced?

- On the web @ [www.SmarterBalanced.org](http://www.SmarterBalanced.org)
- Sign up for the Smarter Balanced e-newsletter
- Follow the consortium on Twitter @SmarterBalanced
- On the VT AOE web @ <http://education.vermont.gov/new/html/sbac.html>
- E-Mail Michael @ [Michael.Hock@state.vt.us](mailto:Michael.Hock@state.vt.us)



# Where can I learn more about Dynamic Learning Maps?

- Dynamic Learning Maps
- [www.dynamiclearningmaps.org](http://www.dynamiclearningmaps.org)
- Common Core Essential Elements
- [http://dynamiclearningmaps.org/moreinfo/essential\\_elements/index.html](http://dynamiclearningmaps.org/moreinfo/essential_elements/index.html)
- On the VT AOE web @ <http://education.vermont.gov/alternate-assessment>
- E-Mail Patti @ [patti.shane@state.vt.us](mailto:patti.shane@state.vt.us)



# Questions

What else would you like to know?

